

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P885878

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDMW-400LM-2700K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885878
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-124)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D40FL-TL1RDMW-400LM-2700K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

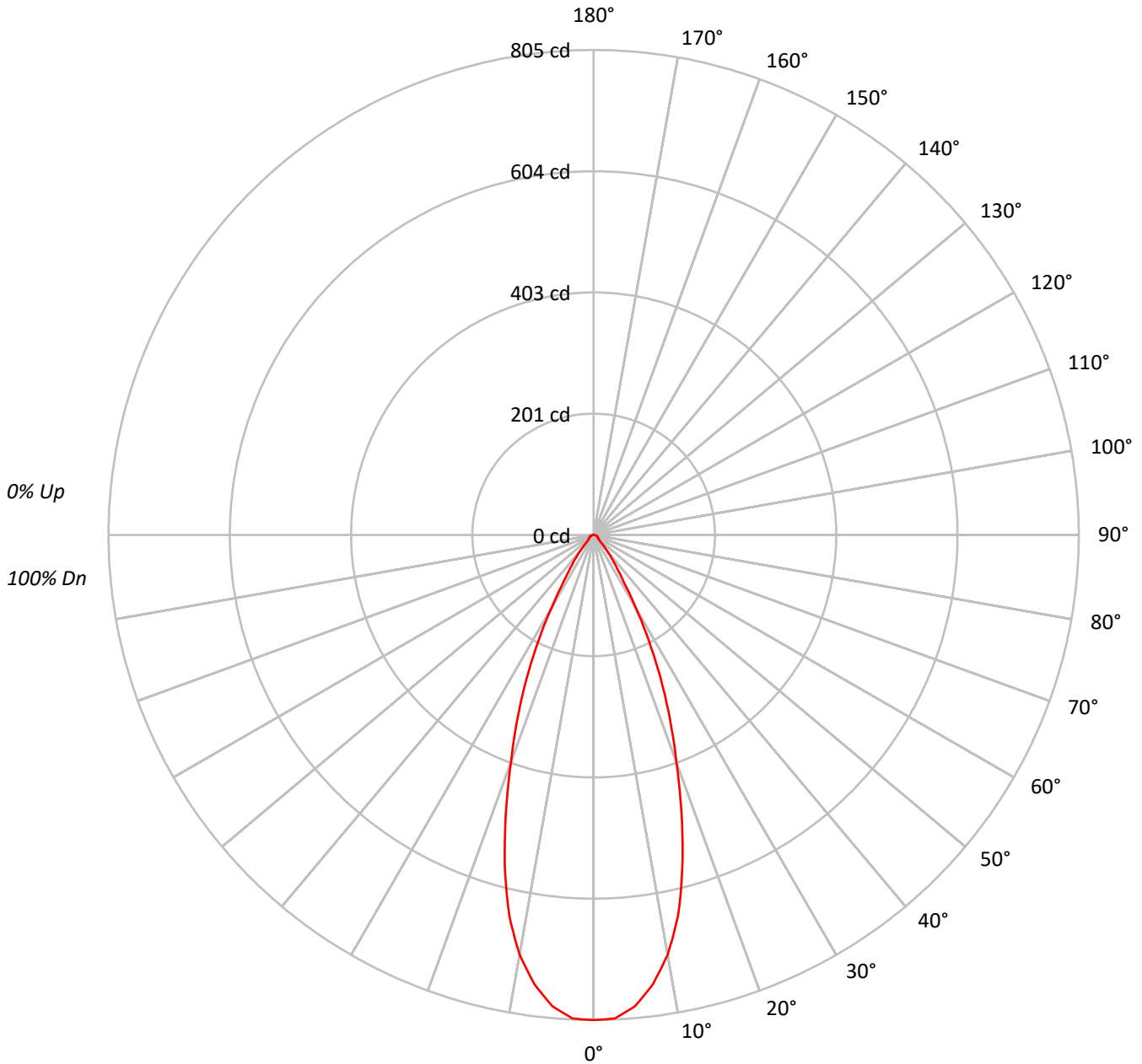
Lumens per Lamp: N/A
Luminaire Lumens: 427.9 lumens
Efficiency: N/A
Efficacy: 71.3 lumens/watt
Spacing Criteria (0/90/45): 0.65 / 0.65 / 0.65
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94																			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88																			
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	83																			
4	99	92	87	83	97	91	86	82	88	84	81	87	83	80	85	82	79	78																			
5	94	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74																			
6	90	82	77	73	89	81	76	73	80	75	72	79	75	72	77	74	71	70																			
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66																			
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63																			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	61	60																			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	65	62	59	58																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1589491
5°	1555941
10°	1417620
15°	1163171
20°	842600
25°	572917
30°	316988
35°	163829
40°	92746
45°	41865
50°	33773
55°	30967
60°	31577
65°	32689
70°	28851
75°	30501
80°	34096
85°	22644

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 45245 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	16.9
10°-20°	155.3	36.3
20°-30°	119.3	27.9
30°-40°	46.0	10.8
40°-50°	14.2	3.3
50°-60°	8.2	1.9
60°-70°	6.6	1.5
70°-80°	4.5	1.0
80°-90°	1.5	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	347.0	81.1
0°-40°	393.0	91.9
0°-60°	415.3	97.1
0°-90°	427.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	427.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	805	
5°	785	72
15°	569	155
25°	263	119
35°	68	46
45°	15	14
55°	9	8
65°	7	7
75°	4	4
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	805.4
2.5°	803.4
5°	785.4
7.5°	752.4
10°	707.4
12.5°	647.3
15°	569.3
17.5°	484.3
20°	401.2
22.5°	330.2
25°	263.1
27.5°	198.1
30°	139.1
32.5°	95.0
35°	68.0
37.5°	50.0
40°	36.0
42.5°	24.0
45°	15.0
47.5°	12.0
50°	11.0
52.5°	10.0
55°	9.0
57.5°	8.0
60°	8.0
62.5°	7.0
65°	7.0
67.5°	6.0
70°	5.0
72.5°	5.0
75°	4.0
77.5°	4.0
80°	3.0
82.5°	2.0
85°	1.0
87.5°	1.0
90°	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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